

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
 4. (Cancelled)
 5. (Cancelled)
 6. (Cancelled)
 7. (Cancelled)
 8. (Cancelled)
 9. (Cancelled)
 10. (Cancelled)
 11. (Cancelled)
 12. (Cancelled)
13. (Cancelled)
14. (Cancelled)
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)
18. (Cancelled)
19. (Cancelled)
20. (Cancelled)
21. (Cancelled)
22. (Cancelled)
23. (Cancelled)
24. (Cancelled)
25. (Cancelled)
26. (Cancelled)

27. (Cancelled)
28. (Cancelled)
29. (Cancelled)
30. (Cancelled)
31. (Cancelled)
32. (Cancelled)
33. (Cancelled)
34. (Cancelled)
35. (Cancelled)
36. (Cancelled)
37. (Cancelled)
38. (Cancelled)
39. (Cancelled)
40. (Cancelled)
41. (Cancelled)
42. (Cancelled)
43. (Cancelled)
44. (Cancelled)
45. (Cancelled)
46. (Cancelled)
47. (Cancelled)
48. (Cancelled)
49. (Cancelled)
50. (Cancelled)
51. (Cancelled)
52. (Cancelled)
53. (Cancelled)
54. (Cancelled)
55. (New) A device for locally contacting aortic valve leaflets with a demineralization fluid, the device comprising
a central shaft;

three distinct fluid contact elements arranged around the central shaft, each fluid contacting element comprising a porous affixed to an impermeable backing, the distal ends of the fluid contacting elements being configured to fit snugly inside of the aortic sinus;

fluid delivery elements for delivering a demineralization fluid from a source to the porous applicators;

a shunt positioned within the central shaft and concentrically mounted therein for providing blood flow from the ventricle;

an aspiration lumen formed from a gap between the shunt and the central shaft; and

a valve occluder mounted to the central shaft, the valve occlude being configured to sit flush with the ventricular side of the aortic valve leaflets.